

## REMARKS

### Status of Claims:

Claims 1-56 were originally filed with the patent application. Claim 49 was canceled in the January 27, 2004 Amendment and Response. Claims 57-62 were added in the January 27, 2004  
5 Amendment and Response. Claims 63-85 are being added herein. Therefore, Claims 1-48 and 50-85 will be pending upon entry of this Amendment and Response.

### Office Action References:

Applicant expressly reserves the right to respond to any rejection using one or more  
10 U.S.C. §102(e) references by filing an appropriate affidavit under 37 C.F.R. §1.131 in any subsequent Response.

### Allowable Subject Matter:

Applicant notes with appreciation the Examiner's indication that independent Claims 50, 60,  
15 and 62 are allowable, as well as any claims depending therefrom.

The Examiner indicated in the October 29, 2003 Office action that original Claims 7-10, 19-22, 27, 29-31, 39-41, 47, 48, and 56 would be allowable is presented in independent form, and that original Claim 42 would be allowable pending addressing a §112 issue and upon presenting the same in independent form. The following claims have been added to place the above-noted claims in  
20 independent form (the corresponding original claim being identified in the corresponding parenthetical): new Claim 63 (original Claim 7); new Claim 64 (original Claim 8); new Claim 65 (original Claim 9); new Claim 66 (original Claim 10); new Claim 67 (original Claim 19, with typographical errors being corrected per the January 27, 2004 Amendment and Response); new

Claim 68 (original Claim 20); new Claim 69 (original Claim 21); new Claim 70 (original Claim 22);  
new Claim 71 (original Claim 27); new Claim 72 (original Claim 29); new Claim 73 (original Claim  
30); new Claim 74 (original Claim 31); new Claim 75 (original Claim 39, with a typographical error  
being corrected per the January 27, 2004 Amendment and Response); new Claim 76 (original Claim  
5 40); new Claim 77 (original Claim 41); new Claim 78 (original Claim 42); new Claim 79 (original  
Claim 47, with typographical errors being corrected per the January 27, 2004 Amendment and  
Response); new Claim 80 (original Claim 48); and new Claim 81 (original Claim 56, with the  
addition of the word "undesired" in the preamble).

10 Independent Claims 1, 23, and 43:

Independent Claims 1, 23, and 43 are each directed to a disk drive that includes an actuator  
arm latch assembly that includes first latch member that is movable from a non-latching position to a  
latching position in response to the disk drive experiencing a first force and while a transducer of the  
disk drive is in a parked position. Such a latch member that moves in this manner is not disclosed by  
15 U.S. Patent No. 6,088,193 ('193 Patent).

The '193 Patent discloses a latch 138 that includes a magnetized head 178. The latch 138 is  
moved from the unlatched position of Figure 5 to the latched position of Figure 4 by the actuator  
assembly 112 moving to the parked position to dispose the read/write heads 120 in the landing zone  
130 of the corresponding disc 108 (column 6, lines 1-29). Specifically, the actuator assembly 112 is  
20 moved by the voice coil motor (VCM) 124 to dispose the read/write heads 120 over the landing zone  
130 of the corresponding disc 108. During this movement, a pin 140 supported by the actuator  
assembly 112 engages a surface 190 of the latch 138 and exerts a force on the latch 138 along the  
direction of arrow 188 in Figure 5. The pin 140 engages the latch 138 at a location that is spaced

from its pivot axis (corresponding with pin 172) such that the latch 138 pivots from the un-latched position illustrated in Figure 5 the latched position illustrated in Figure 4, at which time the read/write heads of the drive are in their parked location. The latch 138 is retained in the latched position of Figure 4 by a magnetic engagement between the head 178 of the latch 138 and the top pole 129 of the VCM 124. It should also be noted that the latch 138 is retained in the unlatched position of Figure 5 by a magnetic engagement between the head 178 of the latch 138 and the bottom pole 129 of the VCM 124.

Based upon the foregoing, when the read/write heads of the disk drive in the '193 Patent are in their parked location (corresponding with Figure 4), no latch member moves from an un-latched position to a latched position in the manner required by Claims 1, 23, and 43. When the read/write heads of the disk drive in the case of the '193 Patent are in their parked location in Figure 4, the latch 138 is forcibly retained in the illustrated latched position by an engagement between the head 178 of the latch 138 and the top pole 129 of the VCM 124.

Based upon the foregoing, independent Claims 1, 23, and 43 are each allowable over the '193 Patent. All claims depending from either of Claims 1, 23, or 43 are thereby also allowable over the '193 Patent for the above-noted reasons. There is therefore no need to separately address the patentability of each of these claims and/or the Examiner's interpretation in relation to any of these claims or any of the references of record in relation thereto.

New Independent Claim 82:

Independent Claim 82 is directed to a disk drive that includes an actuator arm latch assembly that includes a first latch member that is movable from a non-latching position to a latching position. The first latch member includes a first portion that is engageable with an actuator arm assembly of

the disk drive when the first latch member is in a latching position to preclude movement of the actuator arm assembly in a first direction. The first portion is disposed further from the base plate of the disk drive when the first latch member is in the latching position versus the non-latching position. Such a latch member is not disclosed by the '193 Patent.

5           The '193 Patent discloses that a pin 140 supported by the actuator assembly 112 is retained in a groove 174 of a latch 138 when the latch 138 is in its latched position of Figure 4. This groove 174 moves away from the bottom pole 129 when the latch 138 moves from the latched position of Figure 4 to the unlatched position of Figure 5. As such, the spacing between the groove 174 of the latch 138 of the '193 Patent decreases when the latch 138 moves from the unlatched position of Figure 5 to the  
10   latched position of Figure 4. This is in direct contrast to the requirements of Claim 82.

New independent Claims 83-85:

Independent Claims 83-85 correspond with independent Claims 1, 23, and 43 prior to the amendment thereof in this Amendment and Response, with the addition of the word "only" to  
15   describe the movement of the latch from the un-latched position to the latched position. In this regard, independent Claims 83-85 are each directed to a disk drive that includes an actuator arm latch assembly that includes first latch member that is movable from a non-latching position to a latching position only in response to the disk drive experiencing a shock event. Such a latch member that moves in this manner is not disclosed by the '193 Patent.

20           As noted above, the latch 138 in the '193 Patents is forced from its un-latched position of Figure 5 to its latched position of Figure 4 by the pin 140 of the actuator assembly 112 engaging a surface 190 of the latch 138 and exerting a force on the latch 138 along the direction of arrow 188 in Figure 5. The VCM 124 moves the actuator assembly 112. The pin 140 of the actuator assembly

112 engages the latch 138 at a location that is spaced from its pivot axis (corresponding with pin 172) such that the latch 138 pivots from the un-latched position illustrated in Figure 5 the latched position illustrated in Figure 4, at which time the read/write heads of the drive are in their parked location.

5 Since Claims 83-85 each require that the first latch member move from a non-latching position to a latching position only in response to the disk drive experiencing a shock event, and since the '193 Patent explicitly discloses that its latch 138 moves from a non-latching position (Figure 5) to a latching position (Figure 4) by a force exerted on the latch 138 by the operation of the VCM 124 that moves the actuator arm assembly 112 (specifically its pin 140) into engagement with  
10 the latch 138, Claims 83-85 are allowable over the '193 Patent.

Conclusion:

Based upon the foregoing, Applicant believes that all pending claims are in condition for allowance and such a disposition is respectfully requested. In the event that a telephone conversation  
15 would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

MARSH FISCHMANN & BREYFOGLE LLP

By: 

James L. Johnson

Registration No. 34,193

3151 South Vaughn Way, Suite 411

Aurora, Colorado 80014

(701) 293-7680

Date: 7/19/04